

### Abstract

A system for measuring the relative locations of points on a vehicle includes plural electromagnetic radiation sources adapted to be fixed relative to the vehicle and plural electromagnetic radiation receivers, a processor for determining angles between each receiver and each source, a display device, and a processor program routine for monitoring each receiver and generating a graphical display indicating for each source and each receiver whether or not the source is in the field of view of the receiver. A hand-held probe may have at least one additional electromagnetic radiation source and an indicator to indicate whether or not the probe source is in the field of view of all receivers.